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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/769,619	01/23/2001	Ursula Murschall	00/052 MFE	3096
7590 04/05/2004		EXAMINER		
ProPat, L.L.C.			FERGUSON, LAWRENCE D	
2912 Crosby Road Charlotte, NC 28211			ART UNIT	PAPER NUMBER
,			1774	

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
09/769,619 MURSCH		MURSCHALL ET AL.			
Office Action Summary	Examiner	Art Unit			
•	Lawrence D Ferguson	1774			
The MAILING DATE of this communication ap		1			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be a ly within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS fro e. cause the application to become ABANDON	timely filed  ays will be considered timely.  m the mailing date of this communication.  IED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 13.	lanuary 2004.				
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-11 and 14-16 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) 5,6,8,9,11 and 14-16 is/are allowed. 6) ☐ Claim(s) 1-4,7 and 10 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers					
9) The specification is objected to by the Examin					
10) The drawing(s) filed on is/are: a) ac	cepted or b) objected to by the	e Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the corre					
11) The oath or declaration is objected to by the E	Examiner. Note the attached One	Ge Action of form 1 10-102.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig  a) All b) Some * c) None of:  1. Certified copies of the priority documer  2. Certified copies of the priority documer  3. Copies of the certified copies of the pri  application from the International Bure  * See the attached detailed Office action for a list	nts have been received. nts have been received in Applica ority documents have been rece au (PCT Rule 17.2(a)).	ation No ived in this National Stage			
Attachment(c)					
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summa	ary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	8) 5) Notice of Informa 6) Other:	ari atent Application (i 10-132)			

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#### **DETAILED ACTION**

### Response to Amendment

1. This action is in response to the amendment mailed January 13, 2004. Claims 1, 5-6, 8-9, 11 and 14-16 were amended rendering claims 1-11 and 14-16 pending.

### Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-4, 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In instant claim 1, the phrase, "substantially vacuole-free" is indefinite. The term "vacuole" has not been explicitly redefined in the specification. A vacuole is typically defined as "A small cavity or space in the tissues of an organism containing air or fluid" according to Merriam Webster's Collegiate Dictionary and a void is typically defined as "an opening, gap or empty space." A vacuole is not a proper term to be used to describe voids in a white film.

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### Claim Rejections - 35 USC § 103(a)

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-4, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goss et al (U.S. 5,935,903) in view of Maeda et al. (U.S. 6,107,390).

Goss discloses a thermoplastic polymeric film (column 1, lines 10-12 and column 9, lines 65-66) where the film is formed of polyester material, where a polyethylene terepththalate film is preferred (column 2, lines 30-47). Goss discloses the film comprises titanium dioxide pigments (column 4, lines 28-36) where the filler material is added by masterbatch technology (column 6, lines 1-13). The reference discloses the film comprising an optical brightener in an amount of from 50 to 1000 ppm (column 6, lines 14-27) and where the titanium dioxide is in an amount of 5% weight or less (column 4, lines 29-50). Goss discloses the thickness of the film will not exceed 250µm (column 6, lines 49-51). Figures 2-3 of Goss portray a core and outer layer, as indicated in instant claim 10. As to limitation in claim 1, 'a crystallizable polyolefin-free thermoplastic polyester polymer' constitutes a 'capable of' limitation. Such a recitation that an element is 'capable of' performing a function is not a positive limitation, but only requires the ability to so perform. In instant claim 7, 'where the particle size is

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determined using a Sedigraph method' is a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. In regards to instant claim 1, the thermoplastic polymeric film of Goss is substantially vacuole free as a vacuole is typically defined as "A small cavity or space in the tissues of an organism containing air or fluid" according to Merriam Webster's Collegiate Dictionary.

Goss does not disclose titanium dioxide oxidatively coated as in instant claim 1. Maeda teaches a coating material comprising rutile titanium dioxide pigment (column 1, lines 23-26 and column 6, lines 35-37) and aluminum oxide (column 1, lines 25-34) to coat a surface of a substrate such as paper or thermoplastic polyester film (column 1, lines 34-35). Goss and Maeda are analogous art because they are both from the same field of multilayered films. It would have been obvious to one of ordinary skill in the art to oxidatively coat the titanium dioxide of Goss because Maeda teaches the oxidative coating helps improve dispersibility of titanium dioxide pigment (column 1, line 23).

6. Claims 5-6, 8-9, 11 and 14-16 are allowed because the closest prior art does not teach an optical brightener selected from the group of bisbenzoxazoles, phenylcoumarins and bisstearylbiphenyls or a polyester soluble blue dye, as in claims 5

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and 6. Additionally, the closest prior art does not teach the amount of inorganic oxide, whiteness percentage or Yellowness index, as in instant claims 8-9. The cited art fails to disclose regrind or titanium dioxide and optical brightener in the core layer or outer layer, as in claims 11 and 15-16. The closest prior art does not teach motivation or suggestion for modification to make the invention as instantly claimed.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kusama et al. (U.S. 4,145,480) teaches a coated rutile type titanium oxide comprising a brightening agent (column 1, lines 35-56).

## Response to Arguments

- 8. Applicant's remarks to rejection under 35 U.S.C. 103(a) as being unpatentable over Goss et al (U.S. 5,935,903) in view of Murschall et al. (U.S. 5,900,294) are moot based on grounds of new rejection.
- 9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence D. Ferguson

Examiner Art Unit 1774 CYNTHIA M. KELLY
SUPERMISORY PATRIME EXAMINER
TECHNOLOGY CONTER 1700